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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/817,032

04/02/2004

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EXAMINER

NGUYEN, DUSTIN

ART UNIT

PAPER NUMBER

2154

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/817,032	Applicant(s) TANAKA, ATSUSHI	
	Examiner Dustin Nguyen	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :04/02/2004, 07/12/2004, 11/01/2004, 03/29/2006, 12/18/2006.

DETAILED ACTION

1. Claims 1-11 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Latif et al. [US Patent No 6,400,730].

4. As per claim 7, Latif discloses the invention as claimed including a network converter connected to an information processing device and a storage device so as to be communicable [i.e. switch for protocol conversion between Fibre channel, SCSI and IP services] [Abstract, Figure 3; and col 6, lines 44-57], comprising:

a first protocol conversion section which converts data received from the information processing device according to a first protocol into data having a form determined by a Fibre Channel protocol and transmits the data to the storage device [i.e. convert from IP formatted packet to FC formatted packet] [Figures 3 and 4; col 3, lines 23-45; and col 6, lines 44-col 7, lines 30];

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a second protocol conversion section which converts data received from the storage device according to the Fibre Channel protocol into data having a form determined by the first protocol and transmits the data to the information processing device [i.e. convert from FC formatted packet to an IP formatted packet] [Abstract; col 3, lines 6-22; and col 6, lines 58-col 7, lines 40];

a conversion table storage section which stores in a conversion table a combination of a first identification number which is a number for identifying the information processing device and the storage device according to the first protocol [i.e. Device Name of the address table] [Figures 12B-12D; col 11, lines 6-30; and col 13, lines 8-41], and

a second identification number which is a number for identifying the information processing device and the storage device according to the Fibre Channel protocol [i.e. Local Fibre Channel of the address table] [Figures 12B-12D; col 11, lines 6-30; and col 13, lines 8-41];

a first identification number conversion section which converts the first identification number into the second identification number in accordance with contents stored in the conversion table [Figures 3-5 and 12D; and col 6, lines 44-col 8, lines 9]; and

a second identification number conversion section which converts the second identification number into the first identification number in accordance with contents stored in the conversion table [Figures 3-5 and 12D; and col 6, lines 44-col 8, lines 9].

Claim Rejections - 35 USC § 103

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Latif et al. [US Patent No 6,400,730], in view of Lent et al. [US Patent No 7,260,737].

7. As per claim 8, Latif does not specifically disclose wherein the first protocol is an iSCSI protocol and the first identification number is an iSCSI name. Lent discloses wherein the first protocol is an iSCSI protocol and the first identification number is an iSCSI name [col 6, lines 11-23; and col 8, lines 18-31]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Latif and Lent because the teaching of Lent would provide plurality of block access protocols, which provides a unified and coherent access solution to vdisk/LUNs in a heterogeneous SAN environment [Lent, col 6, lines 17-23].

8. As per claim 9, Lent discloses wherein the second identification number is a Node_Name [i.e. assign Node Name] [Abstract; col 2, lines 65-67; and col 6, lines 5-10].

9. As per claim 10, Lent discloses wherein the second identification number is an N_Port_Name [i.e. assign Port Name] [Abstract; col 2, lines 65-67; and col 6, lines 5-10].

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10. As per claim 11, Lent discloses wherein the second identification number is a combination of the Node_Name and the N_Port_Name [i.e. WWN] [col 9, lines 43-50; and col 11, lines 42-60].

11. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Latif et al. [US Patent No 6,400,730], in view of Thompson [US Patent No 6,895,461].

12. As per claim 1, it is rejected for similar reasons as stated above in claim 7. Furthermore, Latif does not specifically disclose a storage device which has a plurality of storage areas and a storage section storing a security management table for registering information about access enable/disable to each of the plurality of storage areas from the information processing device; a network converter connected to the information processing device and the storage device so as to be communicable; and a management terminal connected to the storage device and the network converter so as to be communicable, wherein the management terminal notifies the storage device of information about access enable/disable to each of the plurality of storage areas from the information processing device, determines a combination of the first identification number and the second identification number related to each of the information processing device and the storage device based on the information about the access enable/disable and notifies the network converter of information about the combination of the first identification number and the second identification number. Thompson discloses a storage device which has a plurality of storage areas [140, Figure 1; and col 3, lines 63-col 4, lines 3] and a storage section storing a security management table for registering information about

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access enable/disable to each of the plurality of storage areas from the information processing device [i.e. access list controls access to particular LUN] [322, Figure 5; col 5, lines 47-63; and col 6, lines 34-42]; a network converter connected to the information processing device and the storage device so as to be communicable [i.e. convert] [col 6, lines 34-42]; and a management terminal connected to the storage device and the network converter so as to be communicable, wherein the management terminal notifies the storage device of information about access enable/disable to each of the plurality of storage areas from the information processing device, determines a combination of the first identification number and the second identification number related to each of the information processing device and the storage device based on the information about the access enable/disable and notifies the network converter of information about the combination of the first identification number and the second identification number [i.e. management station for performing operation, configuration and administration, maintenance, and support tasks] [210, Figure 11; col 5, lines 1-4; col 11, lines 10-40; and col 14, lines 62-col 15, lines 10]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Latif and Thompson because the teaching of Thompson on management would add advantage such as greater ability to scale, improved management tools and increased security [Thompson, col 13, lines 50-55].

13. As per claim 2, Thompson discloses wherein the management terminal notifies the conversion table storage section of a combination of the first identification number and the second identification number only for the storage device and the information processing device

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for which access to the storage device is enabled [i.e. link activation] [col 11, lines 48-col 12, lines 35].

14. As per claim 3, Thompson discloses wherein the first protocol is an iSCSI protocol and the first identification number is an iSCSI name [Abstract; and col 2, lines 27-51].

15. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Latif et al. [US Patent No 6,400,730], in view of Thompson [US Patent No 6,895,461], and further in view of Lent et al. [US Patent No 7,260,737].

16. As per claim 4, Latif and Thompson do not specifically disclose wherein the second identification number is a Node_Name. Lent discloses wherein the second identification number is a Node_Name[i.e. assign Node Name] [Abstract; col 2, lines 65-67; and col 6, lines 5-10]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Latif, Thompson and Lent because the teaching of Lent would provide a unique identifier to identify node to prevent communication error.

17. As per claim 5, Lent discloses wherein the second identification number is an N_Port_Name [i.e. assign Port Name] [Abstract; col 2, lines 65-67; and col 6, lines 5-10].

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18. As per claim 6, Lent discloses wherein the second identification number is a combination of the Node_Name and the N_Port_Name [i.e. WWN] [col 9, lines 43-50; and col 11, lines 42-60].

19. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 U.S.C 133, M.P.E.P 710.02, 710.02(b)).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dustin Nguyen

Examiner

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A handwritten signature in black ink, appearing to read 'Dustin', with a long, sweeping horizontal stroke extending to the right.